

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

AUGIE DURANTE and
PABLITA DURANTE,

Plaintiffs,

v.

Civ. No. 99-1179 RLP/DJS

AMERICAN STATES
INSURANCE COMPANY,

Defendant.

MEMORANDUM OPINION AND ORDER

THIS MATTER comes before the court on Defendant's Motion in Limine to Exclude Plaintiffs' Expert or for a *Daubert* Hearing [Doc. 87]. For the reasons set forth below, Defendant's Motion is granted.

BACKGROUND

The sole issue in this case is whether the Durantes are entitled to coverage under their commercial property insurance policy for damage to their truck service building in Gallup, New Mexico. If the property damage was caused by normal settling, as American States Insurance Company (the Company) contends, there is no coverage. If, however, the damage was caused by blasting that occurred at a nearby rock quarry, as the Durantes contend, then there is coverage.

Both sides have hired experts in support of their respective positions. The Company seeks to have the Durantes' expert, Gary T. Carlisle, P.E. excluded. The Company argues that Mr. Carlisle's methodology is nonexistent, his qualifications are inferior, and his opinion is based on pure speculation, contrary to the principles set forth

in *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993) and *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999).

The damage at issue ostensibly occurred in 1995.¹ In June of that year blasting was done at the Twin Buttes Quarry, which is located approximately three-quarters of a mile from the Durantes' business. When the Company received a claim from the Durantes, it hired AGRA Earth & Environmental, Inc. to evaluate the claim. See Distress Investigation, attached as Exhibit 3 ("AGRA Report") to Response to Defendant's Motion in Limine to Exclude Plaintiffs' Expert or for a *Daubert* Hearing [Doc. 91] ("Response").

At the time of the investigation, no blasting records were available. The AGRA Report did, however, estimate the type of charges that could cause structural damage based on information supplied by the Office of Surface Mining Reclamation and Enforcement. Various mathematical calculations to determine the peak particle velocity are presented in the AGRA Report, which also indicated that one sign of excessive "overpressure" from the explosives is the breaking of windows. No windows were broken at the time of the inspection and the Durantes did not report any window breakage. *Id.*

The investigation found that the moisture content around the structure was higher than normal and noted a near-by truck stop's claim of structural damage was found "to

¹ In 1992 the Durantes were having drainage problems around the property and filed a lawsuit. They hired an engineer (not Mr. Carlisle) whose report states: "These Drainage problems are a concern to Mr. Durante because they provide water that ponds over septic tanks and around structures, causing settlement. Tests could be made of the soil to determine the nature of the settlement or collapse of the soil. These would be expensive and may not be warranted, because no matter what the nature of the settlement, the solution will probably be to prevent the ponding of the water." Exhibit 27 to Memorandum in Support of Motion in Limine to Exclude Plaintiffs' Expert or for a *Daubert* Hearing [Doc. 88]. That lawsuit was settled in 1996 and the instant lawsuit filed in 1999.

have been a result of vertical movements of the supporting soils which occurred independently of induced ground motions from the quarry operation.” *Id.* The report concluded that

the most probable cause of distress to the subject building is settlement of moisture sensitive soils beneath the structure. The damage displayed within the structure is consistent with the settlement of the supporting soils. The cracking of the floor slabs as well as separation of joints in plasterboard is indicative of differential movement of the foundations and slabs.

Id.

Mr. Carlisle, the Durantes’ expert, has come to a different conclusion. He states that the settling found by AGRA was caused by the 1995 blasts from the quarry. After Mr. Carlisle was deposed, the Company filed this Motion. After reviewing the parties’ submissions, the court was primarily concerned about Mr. Carlisle’s August 21, 2000 deposition testimony.² This testimony may be summed up by the following interrogation:

Q. [By defense counsel] . . . What you’re saying is that you have done no testing, done no measurements, done no evaluation of the soils underneath that building to determine what they’re composed of. How can you tell what strength or peak particle velocity would be required to cause cracking of those rocks under the Durante property?

A. Well, I know the difference in effect of one stick of dynamite and a hundred sticks of dynamite. I mean, that’s common sense. And I have experience blasting, different blast hole loads.

Q. But you have no basis in scientific fact to tell us that a

² This was a supplemental deposition, noticed by the Durantes, and filed in the court [Doc. 92] for the Durantes’ Response to the Company’s Motion.

blast producing ten inches per second peak particle velocity is going to produce any particular kind of cracking in any particular rocks under that property, can you?

A. No, I don't -- I haven't been there when a blast of ten inches per second of peak velocity went through that property. How could I? That's a silly question.

Q. Nor have you done any seismographic readings from that structure, have you?

A. No, I have not.

Q. So you don't know what's under there, do you?

A. No, I do not.

Deposition of Gary Carlisle, P.E. [Doc. 92] at pp. 47-48.

The court telephonically conferred with counsel on November 9, 2000 to discuss what should be addressed at the *Daubert* hearing; namely, Mr. Carlisle's apparent lack of reference to any materials (studies, tests, treatises, consultations or the like) that would provide a scientific or technical basis to support his opinion. The Durantes' counsel indicated that no hearing was necessary, that he would submit another affidavit from Mr. Carlisle to address the court's concerns. The court has now received Mr. Carlisle's Affidavit [Doc. 117]; the Company's Memorandum Response [Doc. 118]; and the Company's expert's affidavit [Doc. 119].

In Mr. Carlisle's November 22, 2000 Affidavit he stated his conclusion:

Using my experience as a mining engineer in reviewing and interpreting geological data, I used the site specific information provided by the drill logs, my general knowledge of the geological characteristics of the Rio Puerco basin and my specific knowledge of the Rio Puerco basin derived from

drilling within the basin to conclude that the waves from the blasting at the nearby mine site traveled at different velocities through each of the different sedimentary layers. The differences in the velocity of the blast waves caused the sedimentary layers to shift and collapse. The collapse of the sedimentary layers caused the soils to settle which then caused the damage to the Durante property.

Carlisle Affidavit [Doc. 117], ¶ 4.

Mr. Carlisle concludes that “[t]here is no evidence to show unusual ponding or problems with drainage. The blasting at the nearby quarry provides an alternative explanation which is supported by the geology of the area and the site specific information.” *Id.* at ¶ 5. Finally, he notes that his “conclusions are further supported by the fact that a visual inspection of Interstate 40, which is on a direct line between the mine and the Durante property, shows between 10" and 18" of settling of the roadbed and damage to the asphalt.” *Id.* at ¶ 6.

Mr. Carlisle received a B.S. in mining engineering in 1967 from the South Dakota School of Mining and Technology. Deposition of Gary Thomas Carlisle, June 21, 2000, attached as Exhibit A to Memorandum in Support of Motion in Limine to Exclude Plaintiffs’ Expert or for a *Daubert* Hearing [Doc. 88] (Memorandum), 6:19-21. While in school he had a one-semester course in blasting. *Id.* at 7:17-19. In the summer between his sophomore and junior years at school, 1965, he worked at a plant quarry and “did a study of the blasting.” *Id.* at 30:1 & 31:21-24. He stated his “study” was primarily politics: telling homeowners that the company would take care of any blasting damage. *Id.* at 36:17-23. He did no seismic testing. *Id.* at 37:13-15. He has never done seismic testing. *Id.* at 27:6-7. He is not familiar with scaled distance measurements to determine vibration limitations

and has no training in ground vibration measurements and damage assessments. *Id.* at 38:15-25; 39:1-3; & 40:14-16. He currently runs a company which inspects boilers. *Id.* at 25:12-13.

In addition to his visual inspection of the Durante building five years after the blasting, Mr. Carlisle has consulted the following materials to form his opinion: the AGRA Report; AGRA data concerning soils, Exhibit 1 to the Carlisle Affidavit; seismograph reports from the 1995 blasts near the Durante property, Exhibit 2 to Durantes' Response; the "Citizen's Guide to Blasting," *Id.*; and TerraTek Rock Mechanics materials, *Id.*

In *Daubert*, the Court held that once the trial court determines, "pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue[.]" then a preliminary assessment must be made "of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." 509 U.S. at 592-93. The Court then set forth several factors to be considered:

Ordinarily, a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested. . . . Another pertinent consideration is whether the theory or technique has been subjected to peer review and publication. . . . Additionally, in the case of a particular scientific technique, the court ordinarily should consider the known or potential rate of error . . . Finally, "general acceptance" can yet have a bearing on the inquiry. A "reliability assessment does not require, although it does permit, explicit identification of a relevant scientific community

and an express determination of a particular degree of acceptance within that community.”

Id. at 594 (citations omitted).

In *Kumho Tire*, the Court held that “*Daubert*’s general holding--setting forth the trial judge’s general ‘gatekeeping’ obligation--applies not only to testimony based on ‘scientific’ knowledge, but also to testimony based on ‘technical’ and ‘other specialized’ knowledge. . . . We also conclude that a trial court may consider one or more of the more specific factors that *Daubert* mentioned when doing so will help determine that testimony’s reliability.” 526 U.S. at 141.

The problem with Mr. Carlisle’s opinions is that he does not have sufficient training and experience to render his opinion. He relies primarily on his visual inspection of property five years after the blasting took place.³ He references some materials he has reviewed, but he does not show how those materials support his conclusion. In other words, there is no sign of analysis. He does not show the court how he interpreted the data and that his interpretation is in accordance with generally accepted engineering or blasting principles.

This case is remarkably similar to *Ballard v. Buckley Powder Co.*, 60 F.Supp.2d 1180 (D. Kan. 1999). In that case, the plaintiff’s house was damaged and she sued the company that conducted the blasting operations for construction of a nearby highway. Her

³ Mr. Carlisle also relied on his visual inspection of Interstate 40 near the Durantes’ property, which showed settling, to bolster his opinion that the blasting caused the damage in 1995. As pointed out in the Third Affidavit of Robert D. Booth [Doc.119], that portion of the highway was reconstructed in 1997, so any settling occurred at least two years after the blasting ceased.

expert, like Mr. Carlisle, had no education, training or experience in blasting or seismic recording devices. Like Mr. Carlisle, he was unfamiliar with the formula and measurements on the blasting logs. The court stated:

[H]is report does not explain how his training or experience enables him to distinguish between property damage from ordinary settlement problems and damage caused by the “seismic activity” of a blast. He apparently has no particular training or experience with respect to vibration levels or property damage caused by blasting.

Id. at 1182.

In further discussion of the expert’s report, the court noted that he had failed to show how the blasting damage was different from normal settling:

It is common knowledge that some houses settle over time and incur damage of the type claimed, and in fact [the expert’s] report states that damage to [the plaintiff’s] house has appeared from the settling of the walls and foundation and that “[t]he settlement is due to consolidation of the disturbed bearing soils.” The report then assumes without discussion that this settlement was due to the defendant’s blasting. The report contains no mention of the age of [the plaintiff’s] house, the probability that the damage did or did not result from natural settlement of the soil, or the presence of any pre-existing damage of the type now claimed by plaintiff. . . . Nothing is cited to show that [the expert’s] method or basis for determining causation has been tested or subjected to peer review, has a known or potential rate or error, or has attained general acceptance in the field of engineering.

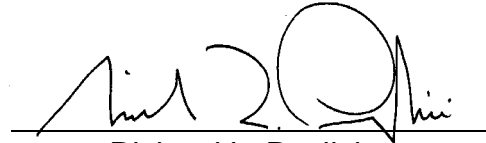
Id. at 1183-84.

Like the expert in *Ballard*, Mr. Carlisle reached his conclusion without analysis. He completely ignored the existing data, two separate reports, concerning the moisture-laden

soils around the Durante property and no where does he explain why the blasting is more likely (or the moist soils less likely) to have caused the damage.⁴

For all of the foregoing reasons, the court finds that the testimony of Gary T. Carlisle is excluded.

IT IS SO ORDERED.



Richard L. Puglisi
United States Magistrate Judge
(sitting by designation)

FOR THE PLAINTIFFS: Pete Domenici, Jr.

FOR THE DEFENDANT: William D. Winter

⁴ In a recent law review article discussing, *inter alia*, the *Ballard* case, the authors note: "The technical literature on blast vibrations explains that structural cracking can be attributed to blasting vibrations only if the cracks in the walls of the structure are documented immediately before and immediately after the blasting. See generally Charles H. Dowding, *Construction Vibrations* (1996); Charles H. Dowding, *Blast Vibration Monitoring and Control* (1985). This documentation is necessary to reduce the possibility that the cracks were caused by other sources Furthermore, an expert's discussion of whether a structure's cracking was caused by a blast must take into account the strength of the blast in terms of ground particle velocity, see D.E. Siskind, M.S. Stagg, J.W. Kopp, and C.H. Dowding, *Structure Response and Damage Produced by Ground Vibration from Surface Blasting*, in U.S. Bureau of Mines, Report of Investigations 8507, at 58, fig. 59 (1980), and blast frequency. Dowding, *Construction Vibrations*, *infra* at 10-11. . . ." Paul M. Lurie & Mark R. Becker, *Kuhmo Tire and Judicial Scrutiny of Expert Testimony by Engineers*, 20-JUL Construction Law. 37, 38 n.27 (July, 2000). By his own testimony, Mr. Carlisle did not utilize any of the cited treatises or take into account ground particle velocity when he formulated his opinion. He asserts in his Affidavit (for the first time) that waves from the blasting traveled at different velocities, but he provides nothing to show how he arrived at that conclusion.